

KOCHETKOV, N.K.; KHORLIN, A.Ya.; BOCHKOV, A.P.

Monosaccharide orthoesters as glycosidation agents. Izv.
AN SSSR. Ser. khim. no.12:2234 D '63. (MIRA 17:1)

1. Institut khimii prirodnnykh soedineniy AN SSSR.

KOCHETKOV, N.K.; BUDOVSKIY, E.I.; TURCHINSKIY, M.F.; DEMISHKIN, V.P.

Primary structure of RKA. Specific splitting of ribonucleic acid. Dokl. AN SSSR 152 no.4:1005-1008 O '63. (MIRA 16:11)

1. Institut khimii prirodnikh soedineniy AN SSSR.
2. Chlen-korrespondent AN SSSR (for Kochetkov).

MOLODTSOV, N.V.; KOCHETKOV, N.K.; DEREVITSKAYA, V.A.

Glycopeptides. Part 6: Further development of the synthesis
of N-aminoacyl derivatives of amino sugars. Izv. AN SSSR,
Ser. khim. no.12:2165-2172 D '63. (MIRA 17:1)

1. Institut khimii prirodnikh soedineniy AN SSSR.

KOCHETKOV, N.K.; CHIZHOV, O.S.

New approach to the identification of methylated monosaccharides.
Izv. AN SSSR. Ser. khim. no.11:2069-2070 N '63. (MIRA 17:1)

1. Institut khimii prirodnikh soedineniy AN SSSR.

KOCHETKOV, N.K.; BUDOVSKIY, E.I.; SIMUKOVA, N.A.

Primary structure of RNA. Interaction of RNA with o-methylhydroxylamine. Dokl. AN SSSR 153 no.3:597-600 N '63.

(MIRA 17:1)

1. Laboratoriya uglevodov i nukleotidov Instituta khimii prirodnkh soedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

DEREVITSKAYA, V.A.; ZHAROV, V.G.; KOCHETKOV, N.K.

Structure of group substances of blood. Proteolysis of the A group substance. Dokl. AN SSSR 153 no.2:342-345 N '63. (MIRA 16:12)

1. Institut khimii prirodnkh soedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

KOCHETKOV, N. K.; DMITRIYEV, B. A.

Monosaccharides. Report No. 7: New synthetic path to higher
sugars. Izv AN SSR Ser Khim no. 4: 669-677 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnnykh soyedineniy AN SSSR.

KOCHETKOV, N.K.; KHORLIN, A.Ya.; OVODOV, Yu.S.

Triterpenic saponins. Report No.7: Monosaccharide composition and size of the carbohydrate moiety of gypsoside. Izv.AN SSSR. Ser.khim. no.1:83-89 Ja '64.

Triterpenic saponins. Report No.8: Some data on the structure of the carbohydrate moiety of gypsoside. Ibid.:90-99 (MIRA 17:4)

1. Institut khimii prirodnikh soyedineniy AN SSSR.

DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.; KOCHETKOV, N.K.

Olycopeptides. Report No.7: Hydroxylaminolysis of o-aminoacyl
derivatives of glucose. Izv. AN SSSR, Ser.khim, no.3:469-475 Nr
'64. (MIRA 17:4)

1. Institut khimii prirodnikh soedineniy AN SSSR.

KOCHETKOV, N.K.; USOV, A.I.

Monosaccharides. Report No.6: New path toward the formation of
deoxy sugars. Izv. AN SSSR. Ser.khim. no.3:475-482 Mr '64.
(MIRA 17:4)

1. Institut khimii prirodnikh soedineniy AN SSSR.

DEREVITSKAYA, V. A.; MOLODTSOV, N. V.; KOCHETKOV, N. K.

Glycopeptides. Report No. 8: Synthesis of N-galacturoseylamine.
Izv AN SSSR Ser Khim no. 4:677-680 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnykh soedineniy AN SSSR.

DELEVITSKAYA, V. A.; KIKOT', O. S.; KOCHETKOV, N. K.

Methylation of the blood group substance A. Izv AN SSSR.
Ser Khim no. 4:761-763 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnkh soyedineniy AN SSSR.

1. LUR'YE, S. I., KULESHOVA, M. G., KOCHETKOV, N. K.

2. USSR (600)

"N-Derivatives of Imidasol (Glicoxaline). I.", Zhur. Obshch, Khim., 9, No. 21, 1939. Lab. of the Tech. of Fine Organic Compounds imeni Professor Berkengeyn, Moscow Inst. of Fine Chem. Tech. Received 1 Jun 1939.

9.  Report U-1626, 11 Jan 1952

KOCHETKOV, M. K.

"Mercury Organic Compounds. XXXIX. Reaction of 2-Chlorovinyl Compounds of Mercury with Bases."

Is. Ak. Nauk SSSR, Otdel Khim. Nauk, 3, 1947,

Quaternary compound of phenylthioethyl methyl bromide
with mercuric chloride. A. N. Tsimonova and N. A.
Kochetova. *Izv. Akad. Nauk S.S.S.R., (Ser. Khim.)*
No. 1000, 226 (1964). PhC(CCl₃)₂ (5 g) and Hg
and HgCl₂ soln. in acid. HgCl₂ shaken 4 hrs., with fur-
ther addn. of 5 g. bromine, gave 9.7% adduct, 1-phenyl-1-
thio-2-(chloromethyl)-2-bromo-3-ene, m. 112-113° (from
Et₂O), easily decomposed by hot aq. alkalis. Treatment
with 40% HCl gave a yellow oil, b. 120-20°, identified as
1-phenyl-1-(thio-1-bromo-2-ene) (I); 7.6% decomposition of
hydrocarbon, m. 104-5°, same, as 104-5°. Treatment of
the Hg soln. with 40% HCl soln. with shaking gave 19.4%
C₁₂H₁₀ and a 40% yield of long Hg in the aq. layer.
acid. HgCl₂ similarly gave 10.3% conversion, while A. N.
in dry CCl₄ readily gave I, as did HgCl₂, AcH, and similar
compounds. PhC(CCl₃)₂ (4 g) in 20 ml. AcOH treated
at 4° with 1.22 g. dry HCl in AcOH, let stand 2 hrs., and
treated 1 hr. in 40% gave 2.7 g. I. C. M. Kozlovskii.

KOCHETKOV, N. K., MBR., Inst. Organic Chem., Dept. Chem. Sci., Acad. Sci., -1948-.

"Mercury Orgaine Compounds. XLIII. Quasi-Complex Combination of Phenylethynyl
Methylketone and Corrosive Sublimate."

Is. Ak. Nauk SSSR, Otdel Khim. Nauk, 3, 1949;

Moscow Under Lenin State Univ. imeni M. V. Lomonosov, -1948-.

Organomercury compounds. XLIV. Preparation of
mercury halomethylides and investigation of simple bonds.
A. N. Nemyrskov and N. K. Kuchukov. (Moscow
State Univ.). *Izv. Akad. Nauk S.S.S.R. Khim. Nauk*
1949, 887-91; cf. C.A. 43, 7413d. $-(CH_3CH_2)_2Hg$
(0.26 g.) (I) with 0.46 g. PhP in 20 ml. CH_2Cl_2 a N atm.
showed no tendency to react in 12 hrs.; on BrOH soln.

gave the same result. The Br analog of I is similarly in-
active, even on a steam bath, with PhP. Treating
 $(BrCH_2)_2Hg$ with 20% KCN in a N stream for 1 hr. led
to hydrolysis, which evolved $BrCH_3$, detected by pas-
age through alk. Hg cyanide soln.; which regenerated
 $(BrCH_2)_2Hg$; the residual soln. with H₂ gave 93%
H₂S; a similar result was obtained with 10% HCl at room
temp., while 20% aq. KI did not react at room temp. but
readily gave $BrCH_3$, detected as above, on warming 2.
hrs. on a steam bath (23% of the Hg recovered as the pre-
solute). $(BrCH_2)_2Hg$ (0 g.) with PhMgBr (from 4.6 g.
PhBr) in a N stream yielded Mg bromomethylide, as above
soln. $(BrCH_2)_2Hg$ (0 g.) with PhMgBr (from 4.6 g.
PhBr) by carbonylation to $BrCH_2COOH$, m. 84-8° (0.6 g.); 1.1
g. PhMgBr was also recovered, as well as 0.2 g. PhMgBr
and 3.2 g. unreacted Hg deriv. $(PhCH_2)_2Hg$ (4.1) with
PhMgBr (from 2.3 g. PhBr) on reducing 3 hrs. gave after
carbonation 1.02 g. PhMgBr and 1.02 g. $PhCH_2COOH$,
m. 126°. Hence the Hg halomethylides do not possess
quadruple properties of $(CH_3CH_2)_2Hg$ deriv. since
they are unable to form a new multiple bond between the
C atoms, while the chloromethyl deriv. are able to do so.

XLV. Preparation of monochloromethylides and
disubstituted from and acetates and their reactions, with
C and O-alkylation and cyclization. A. N. Nemyrskov,
I. F. Lashchenko, and E. M. Tumenova. *Izv. Akad. Nauk*
-Addn. of 4.2 g. CH_3CH_2CHOAc with shaking to 10 g. Hg
acetate in 75 H₂O, followed by addn. of 2.5 g. KCl (after
filtration of Hg soln), gave 100% (chloromethylidene-
chloride, CH_2CH_2CHO , m. 100-101°. Similarly
 CH_3CH_2CHOAc gave 71.5% CH_2CH_2CHO , m. 100-101°
(strikes to CH_2Cl_2 at room temp.). Cyclohexenyl acetate
gave 82% β -(chloromethylidene)cyclohexanone (D, m. 134-35°
(from H₂O), while cyclopropanyl acetate gave 71% β -
(chloromethylidene)cyclopropanone, m. 100-101° (from CH_2Cl_2).
Addn. of 7.2 g. AcCl to 20 g. CH_2CH_2CHO in xylene gave
after 1 hr. 85% CH_2CH_2CHOAc and a residue which by its
soln. in cold HCl was shown to be free of $C_6H_5CH_2CHO$.
 CH_2CH_2CHOAc with AcCl (with a little quinoline added
after 1 hr. to remove unreacted AcCl) gave 85% CH_2CH_2CHO
(CH_2CH_2CHOAc , while I similarly gave 57% cyclohexenyl
acetate). Likewise reactions with $BrCH_2$, which required
6-8 hrs. heating to 80° for completion, gave, resp.: 80%
 CH_2CH_2CHOBr , b. 73-8°, d_4^{20} 1.0279, d_4^{25} 1.0261; 80%
 CH_2CH_2CHOBr , b. 87°, d_4^{20} 1.0171, d_4^{25} 1.0147; 82% cyclo-
hexenyl acetate, b. 100-101°, d_4^{20} 1.0288, d_4^{25} 1.0268.
 CH_2CH_2CHO (20 g.) and 20 g. Ph₃CCl in CH_2Cl_2 by stand
overnight and reduced 3 hrs. gave 65% Ph_3CClCH_2CHO ,
m. 90-101° (from MeOH). Similarly CH_2CH_2CHO gave
85% Ph_3CClCH_2CHO , m. 100-101° (from CH_2Cl_2). XLVI.
Addition of mercuric chloride to acetylenic alcohols and
ethers. A. N. Nemyrskov, N. K. Kuchukov, and V. M.

CA

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A new synthesis of pyrazoles A. N. Nemyatov, N. K. Kucharsky, and M. I. Kibrikova (M. V. Lomonosov State Univ., Moscow, U.S.S.R.; Acad. Sci. U.S.S.R., U.S.S.R. Acad. Sci. Div. Chem. Sci., Moscow, U.S.S.R.) - *Chem. Abstr.* 1980, 20: 4 - Alkyl 2-ethoxycarbonylacetate with NaH and arylhydrazine yield 3-alkylpyrazole and their 1-Ph derivatives, in 30-70% yield. To 30 g. AcCl and 75 g. CCl_4 was added with stirring over 3 hrs. 80 g. powder AlCl_3 in a stream of CCl_4 , continued for 6 hrs.; treatment of the product with H_2O yielded 40% $\text{H}_2\text{O}/\text{CHCl}_3$ (I), bp 60-65°, d_4^{20} 1.075, n_D^{20} 1.450; $\text{H}_2\text{O}/\text{CHCl}_3$ (II), bp 60-65°, d_4^{20} 1.075, n_D^{20} 1.450; similarly, $\text{H}_2\text{O}/\text{CHCl}_3$ (III), bp 60-65°, d_4^{20} 1.075, n_D^{20} 1.450; $\text{H}_2\text{O}/\text{CHCl}_3$ (IV), bp 60-65°, d_4^{20} 1.075, n_D^{20} 1.450. NaH , 10 g. (4 g.) and 4 g. I in 10 ml. Et_2O gave, after 24 hrs. at room temp. and 1 hr. on a steam bath, addn. of 20 ml. 90% NaOH , and catn. with H_2O , 61% 3-ethylpyrazole (V); a 65% yield was obtained by adding 21 g. NaOH to 10 g. NaH , isolate in the main amt. of H_2O , filtering, treating with

by cooling and shaking with 4 g. I, letting stand 24 hrs., and heating 1 hr. on a steam bath, as above. V, bp 54-55°, d_4^{20} 1.030, n_D^{20} 1.415, n_D^{25} 1.410. The 1st procedure with II gave 64% 3-ethylpyrazole, bp 54-55°, d_4^{20} 1.030, n_D^{20} 1.415, n_D^{25} 1.410. With III the 1st procedure gave 64% and the 2nd 64% 3-ethylpyrazole, bp 54-55°, d_4^{20} 1.030, n_D^{20} 1.415, n_D^{25} 1.410. IV gave 64% 3-ethylpyrazole, bp 54-55°, d_4^{20} 1.030, n_D^{20} 1.415, n_D^{25} 1.410. I (10 g.) in 20 ml. Et_2O treated with 10 g. $\text{Pb}(\text{OAc})_2$ in Et_2O with cooling, let stand 24 hrs., and heated 1 hr. on a steam bath similarly yielded 62% 1-phenyl-3-ethylpyrazole, bp 55-56°, isolated on cooling; chloroformate, bp 173-4°. I (10 g.) and 10 g. $\text{p-tert-Cl}_2\text{NHNH}_2$ refluxed in 15 ml. AcOH , let stand overnight, and dist. with H_2O , gave 70% 1-(p-tert-chlorophenyl)-3-ethylpyrazole, bp 93-94°, d_4^{20} 1.055, n_D^{20} 1.460. I gave 64% 1-(p-tert-chlorophenyl)-3-ethylpyrazole, bp 93-94°, d_4^{20} 1.055, n_D^{20} 1.460. II gave 64% 1-(p-tert-chlorophenyl)-3-ethylpyrazole, bp 93-94°, d_4^{20} 1.055, n_D^{20} 1.460. III gave 64% 1-(p-tert-chlorophenyl)-3-ethylpyrazole, bp 93-94°, d_4^{20} 1.055, n_D^{20} 1.460. IV gave 64% 1-(p-tert-chlorophenyl)-3-ethylpyrazole, bp 93-94°, d_4^{20} 1.055, n_D^{20} 1.460. (C) M. Kouda

HESEMEYANOV, A.N., KOCHETKOV, N.K.

Mercury Haloacetylides

Properties of mercury haloacetylides. Uch. zap. Mosk. un. no. 132, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 1953², Uncl.

NESMEYANOV, N.K., KOCHETKOV, N.K.

Mercuric Chloride

Addition of mercuric chloride to acetylenic acids and esters. Uch. zap. Mosk.
un. no. 132, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 195²8, Uncl.

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Reaction of β -chloroethyl ketones with alcohols. A. V. Nemeyanov, N. K. Kozlovsky, and M. I. Rybalkova (M. V. Lomonosov State Univ., Moscow). *Izv. Akad. Nauk S.S.S.R., Khim. Nauk* 1981, 301-301. — RCOCH₂Cl with alc. yields acetals of β -hydroxy ketones. Addition of 10 g. NaOH in 20 ml. alc. MeOH at under 11° to 20 g. MeCOCH₂CHCl in 20 ml. alc. MeOH, then stirring 8 hr., gave after filtration of NaCl 70% acetoacetaldehyde di-Me acetal, bp 60°, d_4^{20} 0.9978, n_D^{20} 1.4281, which decolorizes in water and gives a red color with FeCl₃. A reaction run instead in the presence of dry HCl gave but 24.5% yield. Stirring the product with 10% HCl gave 62% diacetalbenzene, m. 103-104°, while treatment with N, N, N', N'-tetraethylurea gave 44% 2-(β -hydroxyethyl)-2-methylpropanoate (I), m. 141°, d_4^{20} 0.9407, n_D^{20} 1.4220. The ketone with EtOH, as above, gave 87% corresponding di-Et acetal, bp 70-71°, d_4^{20} 0.9407, n_D^{20} 1.4220, while EtOH gave 80% di-Et acetal, bp 114-115°, d_4^{20} 0.9121, n_D^{20} 1.4220. Similarly EtOH with MeCOCH₂CHCl gave 87% β -acetoacetaldehyde di-Et acetal, bp 69-70°, d_4^{20} 0.9360, n_D^{20} 1.4200; EtOH with MeCOCH₂CHCl gave 47% di-Et acetal, bp 84-85°, d_4^{20} 0.9220, n_D^{20} 1.4117. Addition of 15 g. MeCOCH₂CHCl to 2.5 g. Na in 120 g. PhOH at 60-65° and stirring 4 hrs. gave 21% Me 2-phenoxycarboxylate, bp 113-114°, d_4^{20} 1.0771, n_D^{20} 1.5410, and 20% acetoacetaldehyde di-Ph acetal (II), bp 104-105°, m. 21-22°. When the former product is warmed with 20% H₂O, it yields PhOH readily, while treatment with β -CH₃COCH₂CHCl in EtOH yields I. II with the same reagent gives 61% I. (I. M. Kozlovsky)

1932

Reaction of 2-alkoxyethyl esters with alcohols and
compounds. A. N. Kozlovskiy and N. K. Kozlovskiy

(M. V. Lomonosov State Univ., Moscow). Izvest. Akad.
Nauk S.S.S.R., Khim. Nauk 1961, 629-71; Zh. Fiz.
Khim. 35, 2575, 1961. -Chem. (from Zh. Fiz. Khim.)
to cold H_2O with 10 g. $\text{AcOH}(\text{CH}_3\text{COOH})$ yielded after several
hrs. a ppt. of 2,2'-pyridyl ester, HCl salt, yielding with
 NaOH 0.75 g. HCl salt, m. 125-1° (from H_2O , then C_6H_6);
2,2'-pyridyl ester, m. 125-1°; ester, m. 125-1°;
2,2'-pyridyl ester, m. 125-1°. Treatment with hot
 KOH gave 2,2'-pyridyl ester, m. 125-1° (de-
coloration). Similarly $\text{HCOOH}(\text{CH}_3\text{COOH})$ gave 0.75 g. 2,2'-
pyridyl ester, m. 125-1° (coloration), m. 125-1°;
2,2'-pyridyl ester, m. 125-1°; 2,2'-pyridyl ester, m.
125-1° (coloration), m. 125-1° (decoloration). 2,2'-
 $\text{COOH}(\text{CH}_3\text{COOH})$ gave 0.75 g. 2,2'-pyridyl ester, m.
125-1° (coloration), m. 125-1° (decoloration). 2,2'-
 CH_3COOH gave 0.75 g. 2,2'-pyridyl ester, m. 125-1°
(from C_6H_6 , color) (coloration), m. 125-1° (de-
coloration). Heating 12 g. $\text{HCOOH}(\text{CH}_3\text{COOH})$ with 12 g.
 H_2O gave 0.75 g. 2,2'-pyridyl ester, m. 125-1°
alt. m. 125-125° (from H_2O) (coloration), m. 125-1°
(from H_2O , color), m. 125-1° (coloration), m. 125-1°
gave 0.75 g. 2,2'-pyridyl ester, m. 125-1° (from H_2O , color),
colored with alt. KOH , to 2,2'-pyridyl ester, m.
125-1° (decoloration). O. N. Kozlovskiy

Synthesis in the heterocyclic series based on 3-alkoxyaryl ketones. A. N. Nemeyanov and N. G. Kabanov (M. G. Lomonosov Moscow State Univ.). *Dokl. Akad. Nauk S.S.S.R.* 77, 86 (1961); cf. C.A. 48, 12640. $\text{RCOCH}_2\text{C}(\text{H})$ with hydrazine, disulphides, urea, azides, hydrazides, give a variety of heterocyclic compounds, in particular pyrazole. Thus, 10 g. $\text{MeCOCH}_2\text{CHCl}$ in 20 ml. Et_2O added to a cooled soln. of ClH_2N_2 (from 30 g. MeNO_2 , NCONH_2) in 200 ml. Et_2O , gave a cryst. ppt. in 1 hr.; treating this with 5% NaOH aq. soln. with Et_2O and evap. the Et_2O gave 67.5% 3-acetylpyrazole, m. 100-101° (from C_6H_6), sol. in H_2O , Et_2O , MeOH , poorly sol. in pet. ether; 3-pyridylacetylpyrazole, m. 248-49°; oxime,

0 H. K.

CA

"Reaction of ethyl 2-chloroethyl acetate with phenols.
N. K. Kharasch, M. I. Rabinova, and A. N. Komarova,
Ann. (M. V. Lomonosov State Univ., Moscow), Published
Abstr. No. 3, S. S. R. U. 79, TWO-ETHYL-1—KCOCH₂CHO
with phenols in the presence of NaOH in various mediums
(H₂O, dioxane, carbon phenol); from KCOCH₂CHOAc;
if the reaction is prolonged, KCOCH₂CH(OAc)₂ are obtained.
The best yields are obtained in the case with an
equimolar reagent ratio in 4-8 hr. times; dioxane gives
greater yields than does an eq. medium. The reaction is
fast even in 20% aq. NaOH, which gives up to 67% yields.
These prep. were: MeCOCH₂CHOPh, b. 112-114° at
1 mm., d. 1.071; MeCOCH₂CHOC₆H₄M-p, b. 127-128°
at 1 mm., d. 1.040; MeCOCH₂CHOPh, b. 124-125° at
1 mm., d. 1.040; iso-MeCOCH₂CHOPh, b. 111-112° at
1 mm., d. 1.013; and MeCOCH₂CHOC₆H₄M-i, b. 105-106°
at 1 mm.; gave 63% of the expected AcCH₂CHOC₆H₄M-i,
m. 60°, also formed in this reaction, however, was 10%,
2,4-NaC₆H₃(Cl)₂NH₂CHAc, needles, which with acids yields
the free HU compd., soluble in air. If the reaction is run
in dioxane the proportions of the 2 products are effectively
reversed. The structural proof was obtained by treatment
with FeCl₃-HCl in AcOH-HCl, yielding 2-methylphenol-
[2,4]pyrrole from hydride (CA numbering), green, m.
143-4° (from AcOH). Abstr. of AcCH₂CHOPh to
NaOEt-MeOH gave after 21 hrs. 20% AcCH₂CHOPh, b.
78-79° at 1 mm.

(1) M. Kharasch

KOCHETKOV, N.K.; KESSELYANOV, A.N.; SEMENOV, N.A.

Synthesis of isoxasoles from 2-chlorovinyl ketones. Bull. Acad. Sci.,
Div. Chem. Sci. '52, 97-102 [Engl. translation].
(CA 47 no.19:9964 '53)

RESMEYANOV, A.N.; KOCHETKOV, N.K.; KARPITSKIY, M. Ya.; ALEXSANDROVA, G.V.

Diene synthesis with 2-chlorovinyl ketones. Condensation with cyclopentadiene. Doklady Akad. Nauk S.S.S.R. 82, 409-12 '52. (MLRA 5:3) (CA 47 no.14:6876 '53)

1. M.V.Lomonosov State Univ., Moscow.

KOCHETKOV, N.Y.

Synthesis of substituted hydroxypyridines from β -chloro-vinyl ketones. C.R.
Acad. Sci. U.R.S.S. '52, 84, 289-292. (MLA 516)
(NA -All Ap '53:557)

KOCHETKOV, N. K.

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Organic Chemistry

Some transformations of 2-acetyl-3-methylcyclo[2.2.1]heptane. N. K. Kochetkov and M. I. K. Kochetkov. *Dokl. Akad. Nauk S.S.S.R.* 85, 801-2 (1953); cf. C.A. 47, 6076, —2. Acetyl-3-chlorobicyclo[2.2.1]heptane (I) (40 g.) in 400 ml. EtOH, treated in 1 hr. with 100 ml. 10% NaOH and stirred 6 hrs. gave 44% 2-acetylbicyclo[2.2.1]heptane, b_p 84-8°, d₄ 1.0018, n_D 1.4672, which polymerizes on standing and rapidly reduces KMnO₄; 3,3-dinitrophenylhydrazones, m. 151° (from AcOH). Hydrogenation over Pd-CaCO₃ yields 2-acetylbicyclo[2.2.1]heptane, b_p 49-51° (crude), b_p 80-8°, d₄ 1.0071, n_D 1.4773; semicarbazone, m. 188-4.5° (cf. Plets and Menovick, *Izvest. Akad. Nauk S.S.S.R.*, 1949, 218). I (15 g.) in EtOH treated with ice cooling with 4 g. NaOH in EtOH, acid., and acid. with F.O. gave 80% 2-acetyl-3-ethoxybicyclo[2.2.1]heptane, b_p 102-3.5°, d₄ 1.0294, n_D 1.4759; similarly was obtained 80% 3-MeO analog, b_p 88-90°, d₄ 1.0294, n_D 1.4825. I heated with 80% HCOOH and NaOCH₃ 16 hrs. at 100° gave 47% 2-acetylbicyclo[2.2.1]heptan-3-yl formate, b_p 109-11°, d₄ 1.1317, n_D 1.4921; corresponding acetate, prep. similarly, b_p 119-20°, d₄ 1.1180, n_D 1.4828. G. M. Kaminska.

KOCHETKOV, N.K.; ALEKSANDROVA, O.V.

Diene synthesis with 2-chlorovinyl ketones. Condensation with
aliphatic dienes. Doklady Akad. Nauk S.S.S.R. 85, 1033-6 '52.
(CA 47 no.15:7449 '53) (MLRA 5:9)

1. M.V. Lomonosov State Univ., Moscow.

KOCHETKOV N. K.

USSR/Chemistry - Bismuth

Aug 52

"The Charging Effect," L. M. Kul'bert, I. S. Mustafin and N. K. Kochetkov,
Saratov State U imeni N. O. Chernyshevskiy

"Dan SSSR" Vol 85, No 6, pp 1285-1288

The limits of applicability of the charging effect in studying the sensitivity of detection of Bi and Sb with the aid of nitrogen contg heterocyclic compds and their N-alkylates was studied. The sensitivity of such reagents under stable conditions depends on the chem nature of the charging group and its position in the mol as well as the mol wt. Presented by Acad A. N. Nesmeyanov
21 June 52

(CA 47 no. 17: 8576 '53)

23879

ELDERFIELD, Robert Cooley, 1904- ; YUN'YEV, Yu.K., professor [redaktor]
LUTSENKO, I.P.; KNOTOV, O.A.; KUCHENKOV, N.K. [redaktors].

[Heterocyclic compounds] Geterotsiklicheskie soedineniia. Perevod s ang-
liiskogo I.P.Lutsenko, O.A.Knotova, N.K.Kuchenkova, pod red. Yu.K.Yur'eva.
Moskva, Izd-vo inostrannei lit-ry, 1953- . (MLA 6:8)
(Heterocyclic compounds)

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

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CIA-RDP86-00513R000723510014-8

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

1-A-Dehydroxy ketones 1. Synthesis of 6-Methyl-2-deoxy-
amino-ribose-5-phosphate J. K. Rostkiewicz, M. L. Longmire et al.

CH₃COOH, 100% (1.0 g) was added to the reaction mixture. The mixture was stirred for 12 hr. The mixture was then poured into water and extracted with ether. The ether extract was washed with water, dried, and concentrated. The residue was purified by column chromatography on silica gel (10% CH₂Cl₂/90% CH₃COOH) to give 1.0 g of pure 1,2-dichloro-1,2-difluoroethane (1.0 g, 100%).

The pKa's of the amino groups are relatively unstable

First Name: _____ Last Name: _____

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NESEMYANOV, A.N.; KOCHNETKOV, N.K.; RYBINSKAYA, M.I.

Synthesis of 2-alkyl naphtho- and 2-alkyl benzopyrylium salts on the basis of β -chlorovinyl ketones. *Izv. AN SSSR Otd.khim.nauk no.3:479-483 Vy-Je '53.*
(MLBA 6:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Benzopyrylium compounds)

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8

KOCHEVNIKOV, NIK

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

"APPROVED FOR RELEASE: 09/18/2001

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APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

Condensation of Acetylacetyl Ketones with phenol ethers.
A. S. Moserovskiy, N. K. Kochetkov, and L. A. Kuznetsov

Chem. Zvezdopisnyy State Univ., Moscow. Doklady Akad. Nauk S.S.S.R. 61, 15-17 (1959).
With catalysts by SnCl_4 (chloroform), esters of phenol ethers in $\text{C}_6\text{H}_5\text{OH}$ solution. Thus, 20 g. $\text{MeCOCH}_2\text{CH}_2\text{COCH}_3$ and 20 g. MeOPh in 50 ml. $\text{C}_6\text{H}_5\text{OH}$ treated with acetic anhydride 1 hr. with 10 g. SnCl_4 (an HCl evolution) the next stirred 20 min., dist. with 100 ml. Et_2O (100 ml. H_2O added) and the org. layer washed with Na_2CO_3 sol. (saturated) gave 14% $p\text{-MeOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 72-5° (from Et_2O), $\text{C}_{12}\text{H}_{14}\text{O}_4$ (decoloration with KMnO_4 gave pure anhyd. acid m. 181-2°). Similarly EtOPh gave $p\text{-EtOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, 65.6%, m. 64-5° ($\text{MeCOCH}_2\text{CH}_2\text{COCH}_3$ and MeOPh gave 67% $p\text{-MeOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 140-42° m. 17° (from pet. ether); while $\text{AmCOCH}_2\text{CH}_2\text{COCH}_3$ gave 62% $p\text{-MeOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 12-3° (from Et_2O). $\text{MeCOCH}_2\text{CH}_2\text{COCH}_3$ and $p\text{-MeOC}_6\text{H}_4\text{OMe}$ similarly gave 4.5% $p\text{-MeOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 157-6° m. 11° (from pet. ether), oxidized with KMnO_4 to 4,4'-dimethoxy- C_6H_4 , m. 262-3°, $m\text{-C}_6\text{H}_4\text{OMe}$ and $\text{MeCOCH}_2\text{CH}_2\text{COCH}_3$ gave 14% $m\text{-C}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 90-20°, m. 62° (from pet. ether) while $\text{C}_6\text{H}_5\text{COCH}_3$ gave 12.5% $p\text{-EtOC}_6\text{H}_4\text{CH}_2\text{CH}_2\text{COCH}_3$, m. 57-6° (from pet. ether). Thionophene and $\text{MeCOCH}_2\text{CH}_2\text{COCH}_3$ similarly gave 79% $p\text{-thienylCH}_2\text{CH}_2\text{COCH}_3$, m. 117-17.5° m. 22-4-0° (from pet. ether). (L. M. Kozlovskiy)

KOC.HET KOU M K.

USSR •

Synthesis of homopolymer of 2-vinylpyridine based on 2-

chlorovinyl ketone G. M. Kozlovskiy, N. P. Kozlovskaya

and M. A. Kozlovskiy, Vysokomol. Soedin. 1978, 20, 1075

Chem. Abstr. 1979, 89, 1075 (1978) (USSR) (English)

2-vinylpyridine (1) and 2-chlorovinyl ketone (2) were

copolymerized in benzene solution at 60°C. The

copolymerization was carried out in the presence of

azobisisobutyronitrile (AIBN) as initiator. The

copolymerization of 1 and 2 was carried out in the

presence of AIBN in benzene solution at 60°C. The

copolymerization of 1 and 2 was carried out in the

presence of AIBN in benzene solution at 60°C. The

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presence of AIBN in benzene solution at 60°C. The

G. M. Kozlovskiy

2

KOCHETKOV, N.K.

HIDENFELD, Robert, G.; LUTSENKO, I.P. [translator]; KOCHETKOV, N.K.,
[translator]; POLSTAYA, T.P. [translator]; KOCHETKOV, N.K.,
[translator]; YUR'EV, Ya.K., professor, redaktor; SATAROVA, N.V.,
redaktor; GERASIMOVA, Ye.S., tekhnicheskii redaktor

[Heterocyclic compounds] Geterotsiklicheskie soedineniia. Perevod
s angliiskogo I.P.Lutsenka, i dr. Pod redaktsiei I.U.K.IUr'eva.
Moskva, Izd-vo inostranoi lit-ry. Vol.2. 1954. 432 p. (MLRA 7:10)
(Heterocyclic compounds)

**MILDERFELD, R.; KOCHETKOVA, N.K. [translator]; LUTSENKO, I.P. [translator];
KONDRAT'YEVA, O.YA. [translator]; YUR'YEV, Yu.K., professor, redaktor;
SHABAROV, Yu.S., redaktor; GERASIMOVA, Ye.S., tekhnicheskii redaktor**

**[Heterocyclic compounds. Translated from the English] Geterotsikli-
cheskie soedineniia. Pod red. R.Ml'derfilda. Perevod s angliiskogo
N.K.Kochetkova, I.P.Lutsenko, O.IA.Kondrat'evol. Pod red. IU.K.
IUr'eva. Moskva, Izd-vo inostranoi lit-ry. Vol.3. 1954. 357 p.
(Heterocyclic compounds) (MIRA 8:4)**

"APPROVED FOR RELEASE: 09/18/2001

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Passage 1: The Role of a Pharmacist Today

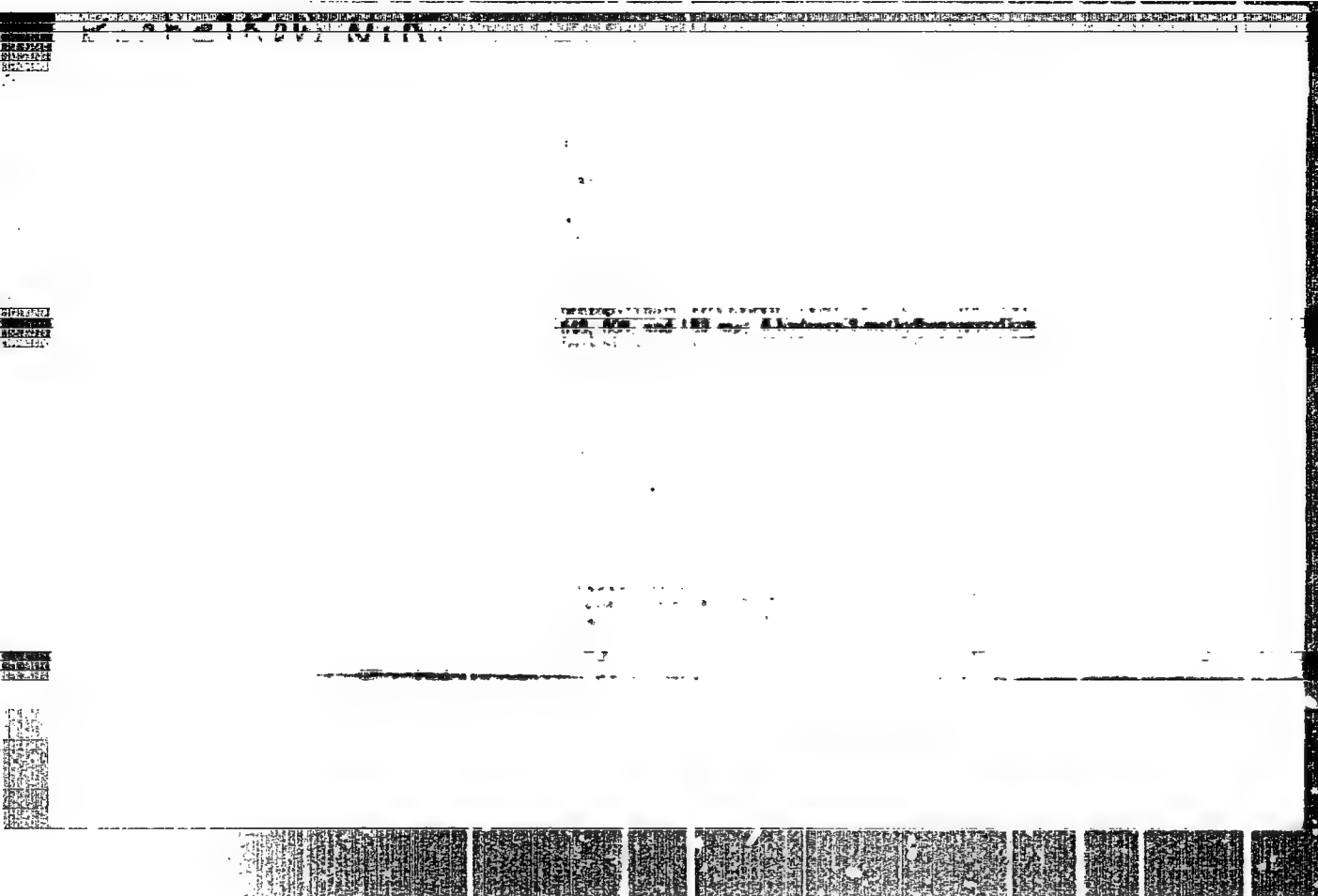
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[illegible]

1. Absorption spectra of STIBINE gas. A. K. Kozlov, A. K. Kozlov, and N. N. Kozlov, Ann. Acad. Sci. USSR Div. Chem. Phys. (1954), 1954, 615-24 Engl. translation - see C.A. 49, 6414b

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8



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ELDERFIELD, Robert C.; REUTOV, O.A., [translator]; LUTSENKO, I.F.
[translator]; KOCHETKOV, N.K. [translator]; KONDRAT'YNA, O.Ya.
[translator]; IUR'EV, I.K., professor, redaktor; SHABAROV, Yu.S.
redaktor; OGANDZHANOVA, N.A., redaktor; ONRASIMOVA, Ye.S.,
tekhnicheskii redaktor.

[Heterocyclic compounds. Translated from the English] Geterotsi-
klicheskie soedineniia. Perevod s angliiskogo O.A. Reutova, i dr.
Pod red. Iu.K. Iur'eva. Moskva, Izd-vo inostrannoi lit-ry, Vol.
4, 1955. 538 p. (MLA 8:11)
(Heterocyclic compounds)

Kochetkov N. K.

✓ Reaction of alkyl 2-chlorovinyl ketones with ethyl aceto-

acetic ester. N. K. Kochetkov, I. A. Kiselev, and

S. V. Stetsko, *Chem. Abstr.* 56: 12358 (1956) (Chem.

Abstr. 1956, 72: 24 Engl. translation) — See C 4 55 8335

R. M. K.

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KACHETON, N. K.

5

Reaction of 2-chloro-9,10-ketone with anthracene 1 3 M. A. YOUTZ
Y. N. Kachetov, M. I. Lyubimova, and N. K. Kachetov
Ind. Acad. Sci. USSR, Div. Chem. Sci. USSR, USSR
(Rusl. translation) - Sci. CA 50, 926, 1958, 11, 11, 11

2 copies

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Kochetkov N. K.

~~Reaction of 2,3-dihydroanthracene with~~
~~A. N. Kochetkov, M. I. Artyukova, and N. K. Kochetkov~~
~~Ann. N.Y. Acad. Sci. 1955, 51, 27~~
~~Ann. N.Y. Acad. Sci. 1955, 51, 27~~

When 10 g. SnCl_4 was added to 11 g. anthracene and 7.5 g. $\text{AcOH} \cdot \text{CHCl}_3$ in 100 ml. CCl_4 in 1 hr. and the mixt. was stirred 6 hrs., then treated with dil. HCl with cooling the org. layer yielded 67.6% 1,2-dihydroanthracene-9,10-dione (I) as 145° (from AcOH), decomp. 200° to anthracene, mp. 174° (from AcOH). Similarly from the appropriate $\text{RCOCl} \cdot \text{CHCl}_3$ were prepd. the following 1,2- RCO analogs of I (8-9% yield, and m.p. given): $\text{R} = \text{H}$, 63-4° (from Me_2CO) (decomp. 200°); $\text{R} = \text{CH}_3$, 70-1° (from Me_2CO) (decomp. 200°); $\text{R} = \text{C}_2\text{H}_5$, 148-9° (from AcOH and Me_2CO). $\text{SnCl}_4 \cdot \text{CHCl}_3$ added to 3 g. anthracene in 50 ml. CCl_4 the refluxing mixt. stirred 10 hrs. with dry HCl , the unreacted anthracene removed, and the soln. evapd. yielded 15.8% II, identical with the above sample. Treated with pure NaOH in Et_2O 10 hrs. gave 78.9% 1-acetyl-1,2-dihydroanthracene-9,10-dione (III), m. 176-8° (from Me_2CO). Similarly were obtained: the 1- PrCO , m. 152-1° (from Me_2CO), and 1-isopropyl analog, m. 150, w.p. 1.5000. II (3.3 g.) added to 50 ml. Et_3NH and

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REACTION OF 2-CHLOROVINYL...

reduced 2 hrs gave, after evapn and extra with 5% HCl
and Et₂O, 25.3% of the 1-hr analog of I, m. 152-5°
(from Me₂CO), while the eq. with gave 64.3% 2-PhN
analog of II, m. 52-4° (from eq. Me₂CO) (pure, m. 157-
8°). I (0.84 g.) shaken with 0.6 g. NaOH in 15 ml. Et₂O
2 hrs gave 87.8% 1-EtO analog of I, m. 152-4° (from
Me₂CO). G. M. Knochen

$\frac{1}{2}$

254

Kochetkov, N. K.

USSR/ Chemistry - Synthesis

Card 1/1 Pub. 40 - 23/27

Authors : Nesmeyanov, A. N.; Kochetkov, N. K.; and Dombrovskiy, Ya. V.

Title : Beta-aminovinyl ketones. Part 3. Synthesis of alkyl-beta-aminovinyl ketones

Periodical : Izv. AN SSSR. Otd. khim. nauk 1, 179-181, Jan-Feb 1955

Abstract : Brief announcement is made on the development of a new method for the synthesis of alkyl-beta-aminovinyl ketones from beta-chlorovinyl ketones with a yield of 78 - 84% of the theoretical. This method makes alkyl-beta-aminovinyl ketones easily accessible compounds and makes it possible to use these ketones in organic synthesis. The physico-chemical properties of alkyl-beta-aminovinyl ketones are described. Seven references: 1 USSR, 3 German, 2 French and 1 USA (1924-1953). Table.

Institution: The M. V. Lomonosov State University, Moscow

Submitted : October 27, 1954

NEZHEMYANOV, A.N.; KOCHETKOV, N.K.; RYBINSKAYA, M.I.; UOLOVA, B.V.

Certain reactions of alkyl-*p*-phenoxyvinyl ketones. Izv. AN SSSR.
Otd.khim.nauk no.4:649-656 J1-Ag '55. (MLBA 9:1)

1.Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Ketenes)

KOCHETKOV, N.K.; KUDRYASHOV, L.I.; KUSNETSOV, A.N.

The reactions of alkyl- β -chlorovinyl ketones with ethyl acetoacetate.
Izv. AN SSSR, Otd. khim. nauk no. 5: 809-816 8-0 '55. (MIRA 9:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Ketenes) (Acetoacetic acid)

Subject : USSR/Chemistry

Card 1/1 Pub. 119 - 3/6

Author : Kochetkov, N. K., (Moscow)

Title : Chemistry of β -chlorovinyl ketones

Periodical : Usp. khim., 23, no. 1, 32-51, 1955

Abstract : The synthesis and chemical behavior of alkyl- β -chlorovinyl ketones are described. Their use in the synthesis of aliphatic, alicyclic, and heterocyclic compounds is reviewed. A table illustrating the transformations of β -chlorovinyl ketones is included. 42 references (28 Russian: 1894-1954).

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

Isopropyl series II. Reactions of 1-chloroisopropyl-

~~Author~~ N. K. Kholodny and A. Ya. Khoshin (Moscow State Univ.)
~~Date~~ June 1960
Published by KSCN, 70 ml. MOEL.

1. The first step in the synthesis of the polymer is the preparation of the monomer, which is done by the reaction of the starting materials, CH_3COOH and CH_3COCl , in the presence of a catalyst, AlCl_3 , to form the monomer, $\text{CH}_3\text{COOCH}_2\text{CH}_2\text{COOCH}_3$.

[illegible]

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ROCHETON, N.Y.

5

Reaction of 1-chlorovinyl ketones with phenyl
N-ethylcarbamoyl (Mannich base) (See J. Amer. Chem. Soc.
75, 1953-1955).—Heating 3.5 g. PhN, and 5 g.
MeCOCH:CHCl in CCl₄ 10 hrs. under reflux gave 33%
1-phenyl-4-acetyl-1,2,3-triazole (I), m. 108-9° (from dil.
EtOH), which with alk. soln. of iodine yields CHI₃, am-
phiphilic, m. 222-3°. PhN₂ and PhCOCH:CHCl simi-
larly gave 29.2% 1-phenyl-4-butyryl-1,2,3-triazole, m. 100-
10°. IsobutylCOCH:CHCl and PhN₂ similarly gave 21%
1-phenyl-4-isobutyryl-1,2,3-triazole, m. 90.5-91°. CCl₄H₇
COCH:CHCl and PhN₂ gave 61% 1-phenyl-4-(4-chlorobutyryl)-
1,2,3-triazole, m. 184-5° (from CCl₄), which heated with
C₂H₅NH₂ in EtOH 8 hrs. gave 96% 2-amino-4-(1-phenyl-4-
triarylmethylthiazole-HCl.H₂O), decomp. 213-5°; free base, m.
174-5° (from dil. EtOH). Oxidation of I with alk. KMnO₄
gave 1-phenyl-1,2,3-triazole-4-carboxylic acid, m. 149-50°
Also in J. Gen. Chem. U.S.S.R. 29, 1313 (1955) (Engl.
translation). G. M. Kozlov, et

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CIA-RDP86-00513R000723510014-8

APPROVED FOR RELEASE: 09/18/2001

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КОСМЕТЕОВ, Н. К.

"APPROVED FOR RELEASE: 09/18/2001

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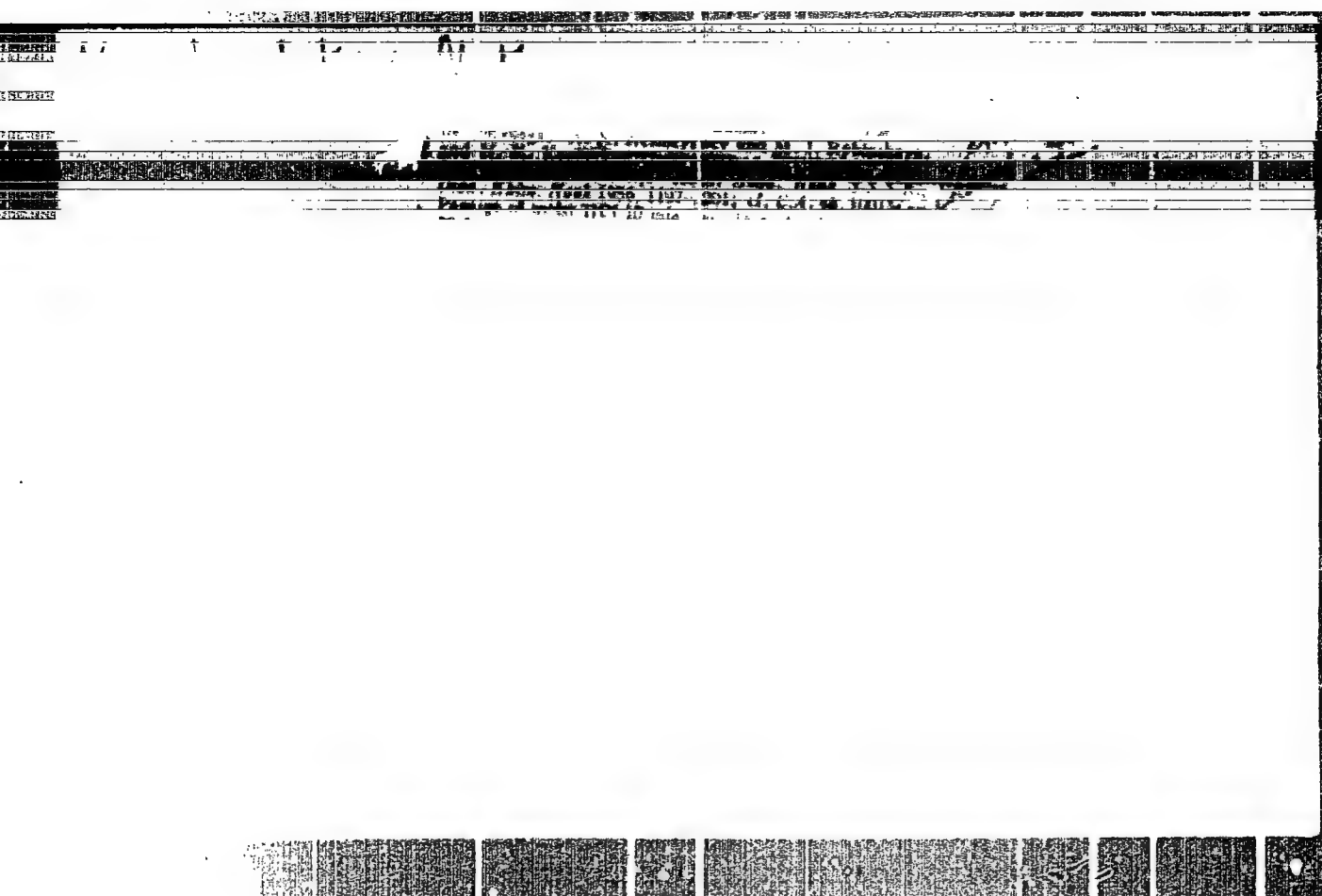
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CIA-RDP86-00513R000723510014-8"

KOCHETKOV, M.K.; DOMBROVSKIY, Yemish; HAZHENOVA, A.V.; SEVERIN, Ye.S.; KRESHTANDOV, A.N.

β -amino vinyl ketones. Part 4. Synthesis of ketones of the pyridine series. Izv. AN SSSR Otd. khim. nauk no. 2:172-176 P 156. (MLHA 9:7)

1. Moskovskiy gosudarstvennyy universitet imeni N.V. Lomonosova.
(Ketenes) (Pyridine)

ketones. New Synthesis of Oxym...

Orig Pub: Izv. AN SSSR, Otd. Khim. N., 1956, No 6, 676-680.

APPROVED FOR RELEASE: 09/18/2001

Abstract: A new method is offered for the synthesis of β -amino ketones by the hydrolysis of the products of interaction R (R-alkyl) and alkyl- β -dialkylamino-vinylketones. The reaction proceeds smoothly with CH_3 , but not with CH_3Br ; the higher the radicals, the yields become lower. With $(\text{CH}_3)_2\text{SO}$, the yield is lowered to 4-5%. The method of the synthesis of $\text{RCOCH}=\text{CHN}(\text{CH}_3)_2$ (where R-alkyl) from $\text{RCOCH}=\text{CHCl}$ is applied in the synthesis of aryl- β -dimethylamino-vinylketones. Obtained were (enumerated are the

Card : 1/3

USSR/Organic Chemistry, Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya No 6, 1957, 19073.

ketones, yield in percent, boiling p. in $^{\circ}\text{C}/\text{mm Hg}$, n_D^{20} , d_4^{20}):
 $\text{C}_6\text{H}_5\text{COCH}=\text{CHN}(\text{CH}_3)_2$, 56.4, 95-96/4 1.5400, 0.9533;
 $\text{C}_6\text{H}_{11}\text{COCH}=\text{CHN}(\text{CH}_3)_2$, yield 80%, melting p. 90-91
(from petr. ether). A solution of 11 g. η -Cl $\text{C}_6\text{H}_5\text{COCH}=\text{CHCl}$ in 15 cc C_6H_6 on cooling and stirring, is added to 20 cc of a 30% aqueous solution of $(\text{CH}_3)_2\text{NH}$, stirred for an hour, yielding η -Cl $\text{C}_6\text{H}_5\text{COCH}=\text{CHN}(\text{CH}_3)_2$, 82.4%,
boiling p. 110-120/4

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 848

Author: Kochetkov, N. K., Khorlin, A. Ya., and Karpeyskiy, M. Ya.

Institution: None

Title: Direct Synthesis of Aryl- α -chlorovinylketones

Original

Periodical: Zh. obshch. khimii, 1956, Vol 26, No 2, 595-598

Abstract: A convenient method is described for the synthesis of aryl- α -chlorovinylketones $\text{ArCOCH}=\text{CHCl}$ (I), where Ar can be C_6H_5 (a), $n\text{-CH}_3\text{C}_6\text{H}_4$ [sic] (b), $n\text{-ClC}_6\text{H}_4$ (c), $o\text{-ArC}_6\text{H}_4$ (d), $n\text{-NO}_2\text{C}_6\text{H}_4$ (e) [Tr. Note: n- apparently is equivalent to p-], by the direct reaction of ArCOCl with C_2H_2 in the presence of AlCl_3 and ethylene chloride. To a solution of 100 gms $\text{C}_6\text{H}_5\text{COCl}$ in 100 ml ethylene chloride cooled to zero degrees, 95 gms of anhydrous AlCl_3 are added with cooling and constant mixing (temperature 10°); next, C_2H_2 is passed through the mixture with vigorous stirring for 6-7 hours at $40\text{-}50^\circ$; the reaction mixture is then poured over ice, and the organic layer separated and dried

Card 1/2

KOCHETKOV, M.K.; KUDRYASHOV, L.I.

Interaction of β -chlorovinyl ketenes with β -dicarbonyl compounds.
Part 2. Ketovinylation of alkylmalonic esters. Zhur.ob.khim. 26
no.3:851-856 Nr '56. (MLA 9:8)

1. Institut farmakologii Akademii meditsinskikh nauk SSSR.
(Malonic acid) (Ketenes) (Vinylation)

"APPROVED FOR RELEASE: 09/18/2001

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CIA-RDP86-00513R000723510014-8"

KOCHETKOV, N. K.

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4405

Author : Kochetkov, N. K., Vorotnikova, L. A.

Title : On Synthesis of Phthalazines by Cyclization of Acylhydrazones of Aromatic Aldehydes

Orig Pub : Zh. obshch. khimii, 1956, 26, No 4, 1143-1145

Abstract : Treatment of acylhydrazones of aromatic aldehydes with HCl gas in iso-C₄H₁₀ (1 hour at ~100° and 1 hour boiling) gives not derivatives of phthalazine (PA) as was formerly believed (Agarwal J. et al., J. Chem. Soc., 1929, 1941, 1930, 2354) but the osines (A) of the corresponding aldehydes. This is demonstrated in the case of acetyl- and benzoyl hydrazones of veratric aldehyde (I and II) and benzoyl hydrazone of anisaldehyde. The very close melting point values of PA and the corresponding A have contributed to the previous erroneous conclusions. Formation of A and not of PA in the

Card 1/2

- 64 -

KOCHETKOV, N. K.

USSR/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19132

Author : Kochetkov N. K., Dadykina N. V.

Inst :

Title : Synthesis of Substituted Benzylamines and N-benzyl-chloropropionamides.

Orig Pub: Zh. obshch. khimii, 1956, 26 No 9, 2612-2617

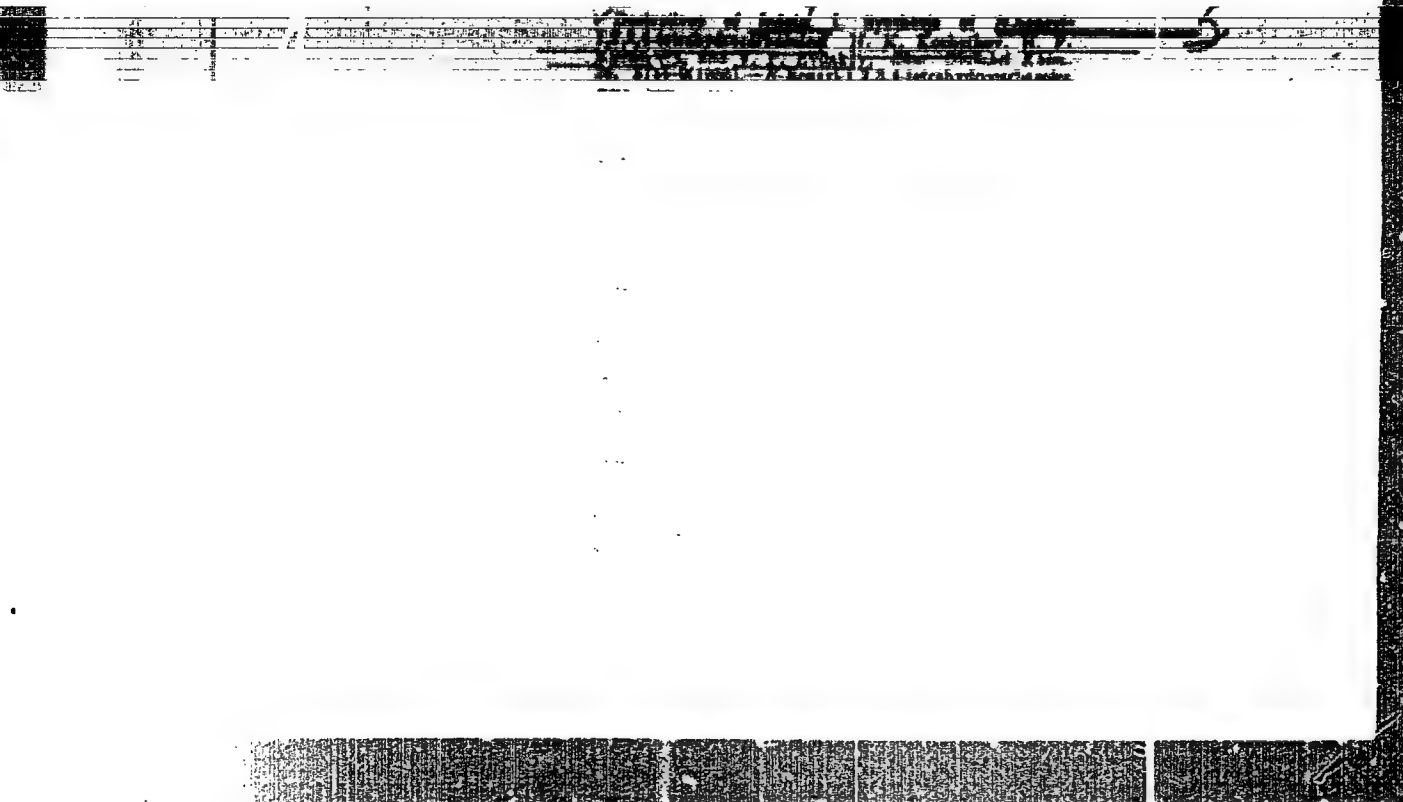
Abstract: With the purpose to determine the influence of a substitute in the nucleus of C₆H₅-CH₂-NH₂ (I) on antispasmodic activity (PA) RCH₂-NHCOCH₂-CH₂-Cl (II) is synthesized; a general method of synthesis is worked out substituting I by urotropine salts. To 12 g. of 3,4- (CH₃O)₂C₆H₃CH₂-NH₂ (III) in 60 cc water at 8-10° are added in drops simultaneously 9.13 g. ClCH₂-CH₂-COCl (IV) and 2.66 g. NaOH in 15 cc water, the addition of NaOH is carried to a pH 8.0-8.5, stirred for 30-40 min. at ~20° and II

Card : 1/5

CH₂-C₆H₄-CH₂-NH₂ 45.6, 84-85°/10, 1.555/12, 1.6405,

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CIA-RDP86-00513R000723510014-8"

KUCHEROVA, N.F.; KOCHETKOV, N.K.

Indole derivatives: Part 2. Synthesis of certain 1, 2, 3, 4-tetrahydro- γ -carboline derivatives. Zhur.ob.khim. 26 no.11:3149-3154
N 156. (MIRA 10:1)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk
SSSR. (Indole)

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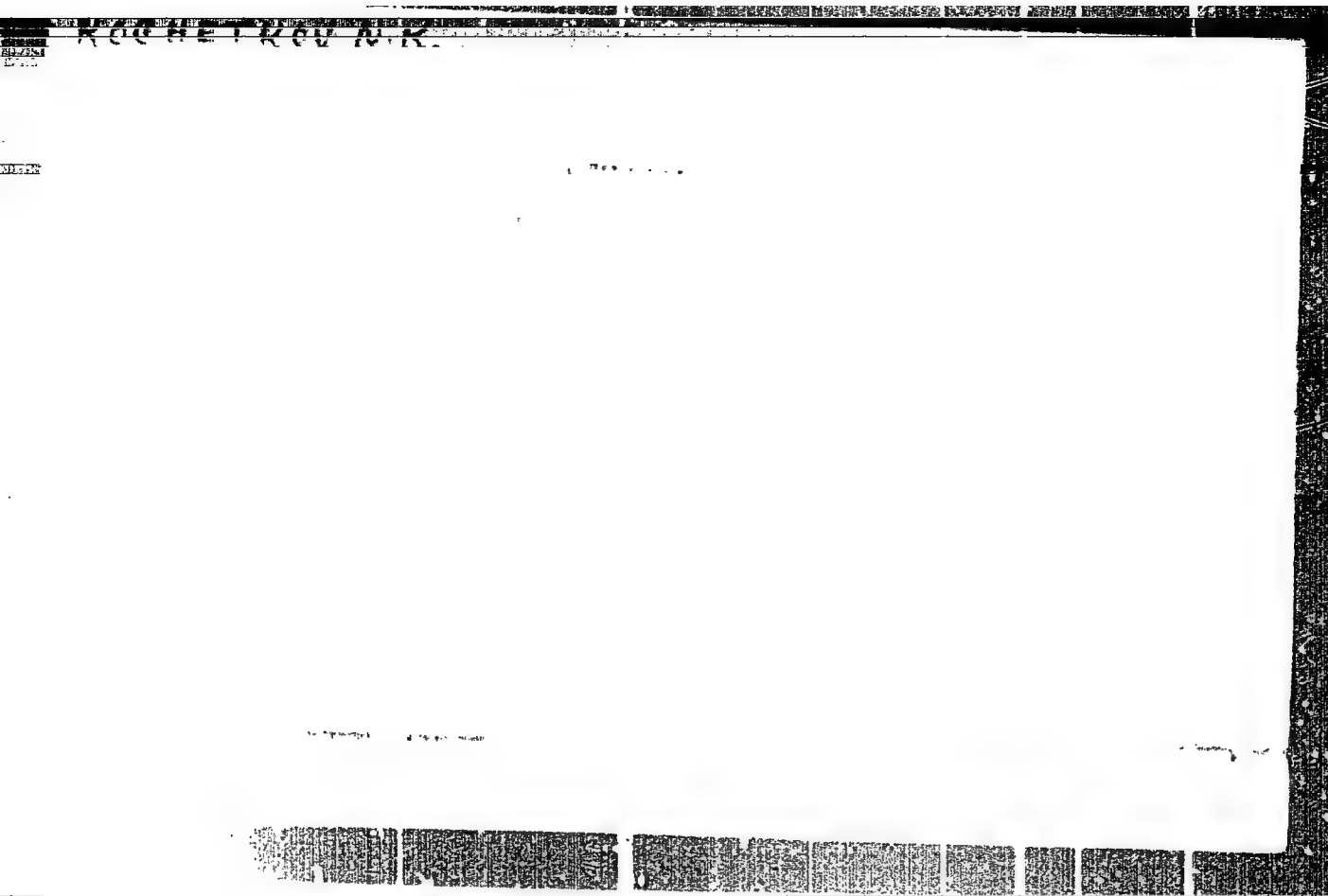
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CIA-RDP86-00513R000723510014-8"

RESNAYANOV, A.N.; KOCHETKOV, N.K.

β -Chlorovinyl ketones in the synthesis of heterocyclic compounds,
Uch.sop.Mosk.un. no.175:85-95 '56. (MIRA 10:3)
(Heterocyclic compounds)
(Ketenes)

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723510014-8"

KOCHETKOV, M.K.; KHOMUTOVA, Ye.D.; MIKHAYLOVA, O.B.; KRESCHENYANOV, A.N.

Synthesis of arylpyrazoles. Izv. AN SSSR Otd. khim. nauk
no.10:1181-1185 O '57. (MIRA 11:3)

1.Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Pyrazole)

Kochetkov, N. K.

KLIMKO, V.T.; KHORLIN, A.Ya.; MIKHAILOV, V.A.; SKOLDINOV, A.P.; KOCHETKOV, N.K.

β -aminovinyl ketones. Part 7: Reaction of β -chlorovinyl ketones with tertiary amines. Izv. ob. khim. 27 no. 1:62-65 Jan '57. (MIRA 10:6)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR. (Vinyl compounds) (Ketones) (Amines)

486

AUTHORS:

Kochetkov, N. K., and Kudryashov, L. I.

TITLE:

Reaction of beta-Chlorovinyl Ketones with beta-Dicarbonyl Compounds. Part 3. Ketovinylation of Malonic Ester. New Synthesis of alpha-Pyrones (Vosmodystvye beta-khlorvinilketonov s beta-dikarbonil'nyimi soyedineniyami. III. Ketovinilirovaniye malonovogo estira. Novyy sintez alpha-pironov)

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 248-253 (U.S.S.R.)

ABSTRACT:

The ketovinylation reaction of malonic ester was considered of interest for the development of new organic synthesis methods for the aliphatic and the oxygen-containing heterocyclic series. A new method of synthesizing beta-ketoalkenylmalonic esters of the $\text{R-COCH}=\text{CHCH}(\text{COOC}_2\text{H}_5)_2$ type by the reaction of beta-chlorovinyl ketones with ethoxymagnesiummalonic esters, is described. Acetyl chloride which preserves the homogeneity of the medium during reaction was used as a condensation medium. Cyclization in this case was realized simply by heating the ketoalkenylmalonic ester/acetyl chloride mixture and the product (pyrone) obtained was purified by distillation. In this way, the authors obtained 6-methyl-, 6-ethyl- and 6-propyl-3-carboethoxy-alpha-pyrones

Card 1/2

January 27, 1956

AVAILABLE:

487

AUTHORS: Kochetkov, N. K.; Kucherova, N. F.; Yevdakov, V. P.

TITLE: Indole Derivatives, Part 3. Synthesis of 6-Oxy-1,2,3,4-Tetrahydrocarbazole Derivatives (Proizvodnye Indola. III. Sintez proizvodnykh 6-oksi-1,2,3,4-tetragidrokartazola)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 253-257 (U.S.S.R.)

ABSTRACT: In order to explain the effect of changes occurring in the nucleus of the molecule on the myotic activity of indole derivatives, the authors synthesized an eserine analogue of the tetrahydrocarbazole series, namely, methylurethan of 6-oxy-9-methyl-1,2,3,4-tetrahydrocarbazole. It is shown that the Tomlinson (2,3) method of synthesizing tetracarbazole derivatives by the condensation of aromatic amines with 2-oxycyclohexanone in the presence of hydrochloric acid is false and inapplicable. The products obtained by the Tomlinson method were found to be acyclic products of condensation, namely 2-arylamine-cyclohexanones. It is pointed out that the condensation of aromatic amines with oxycyclohexanone into tetrahydrocarbazole derivatives can be realized provided the hydrochloric acid (used by Tomlinson) is substituted with phosphorus

Card 1/2

January 4, 1956

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CIA-RDP86-00513R000723510014-8

Card 2/2

79-2-38/53

AUTHORS:

Kochetkov, M. K.; Khomutova, Ye. D.; Karpeyskiy, M. Ya.; Khorlin, A. Ya.

TITLE:

Study of Isoxazole. Part 3. Synthesis of Arylisoazoles (Issledovaniye v ryadu isoksazola. III. Sintez arilizoksazolov)

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 452-457 (U.S.S.R.)

ABSTRACT:

It is shown that aryl-beta-chlorovinyl ketones react with hydrochloride hydroxylamine under the very same conditions as their aliphatic analogues. When both components are heated in methanol, they produce high yields of arylisoazoles. The reaction of alkyl-beta-chlorovinyl ketones with hydroxylamine yields a mixture of alpha- and gamma-isomers (5- and 3-substituted isoxazoles) with 50 - 60% of the alpha-form. The reaction with phenyl-beta-chlorovinyl ketone produces a mixture of alpha- and gamma-substituted isoxazoles in approximately equal amounts. The alpha-isomer content in the phenylisoazole was 62-67%. Phenyl-beta-chlorovinyl ketones with substituents in the aromatic ring react smoothly with hydroxylamine, giving high yields of arylisoazoles. It is shown that the ratio of alpha- and gamma-substituted isoxazoles formed during the reaction of beta-substituted vinyl ketones $\text{RCOCH}=\text{CHX}$ with hydroxylamine depends

Card 1/2

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A

G

79-2-40/58

AUTHORS: Kochetkov, N. K. and Vinogradova, V. N.
TITLE: Ketovinylation of Thiophenols (Ketovinilirovaniye tiofenolov)
PERIODICAL: Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 460-464 (U.S.S.R.)

ABSTRACT: This report is devoted to the study of the first reaction between beta-chlorovinyl ketones with thiophenols. A new method was developed for the synthesis of hitherto unknown aryl-beta-acylvinyl sulfides which are derived with high yields from the reaction of beta-chlorovinyl ketones with thiophenols in an alkali medium. It was established that during the ketovinylation of thiophenols, the actual reaction includes the sodium thiophenolate and is followed by nucleophilic substitution of the Cl atom in the molecule of the beta-chlorovinyl ketone under the effect of the thiophenolate ion. A study of certain reactions of these compounds showed a close similarity to other beta-substituted vinyl ketones. The aryl-beta-acylvinylsulfides $\text{RCOCH}=\text{CHSR}$ obtained as a result of the reaction are described as colorless solid bodies easily separated from the reaction mixture by conventional means. All the synthesized sulfides showed good storage stability.

Card 1/2

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79-2-40/58
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Ketovinylation of Thiophenols.

There are 13 references, of which 10 are Slavic

ASSOCIATION: Moscow State University

PRESENTED BY:

SUBMITTED: February 21, 1956

AVAILABLE: Library of Congress

Card 2/2

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KOCHETKOV, N.K.

ARENDAKUK, A.P.; BUDOVSKIY, N.I.; GOTTIKH, B.P.; KARPEYSKIY, N.Ya.
KUDRYASHOV, L.I.; SKOLDINOV, A.P.; SMIRNOVA, N.V.; KHORLIN, A.Ya.
KOCHETKOV, N.K.

Dihydroarsomycin and related compounds. Part 1. Zhur.ob.khim.
27 no.5:1312-1318 My '57. (MIRA 10:6)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh
nauk SSSR.

(Antibiotics)

"APPROVED FOR RELEASE: 09/18/2001

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1. The first part of the document is a list of the names of the individuals who were involved in the project. The names are listed in alphabetical order. The names are: [illegible]

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